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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

In the Matter of )

) IB Docket No. 95-59

Preemption of Local Zoning Regulations )

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**COMMENTS OF**  
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## Summary

GE American Communications, Inc. (GE Americom), whose customers use both its medium-powered Ku-band fleet to broadcast video and audio programming to small antennas and the VSAT networks offered by its subsidiary GE Capital Spacenet Services, Inc., welcomes the notice of proposed rulemaking in this docket. The rules proposed here will improve upon those in effect today by providing more explicit guidance to zoning authorities of the limits of permissible regulation and the justifications these officials must make if they appear to have stepped over the proper scope of local regulation of small antennas.

GE Americom believes that the proposed rules properly protect the strong federal interest in maintaining the ability of customers to choose small-antenna technology to meet their communications needs. Accordingly, the proposed rules should be adopted, with only minor modifications that clarify the standards the Commission will use in evaluating local regulations and which recognize the protection necessary to VSATs and to receive-only antennas against unreasonable local regulation.

The minor modifications GE Americom suggests that are common to VSATs and small receive-only antennas permit a more precise ascertainment of when a local regulation becomes suspect and clarify the justifications with which local officials may rebut presumptions of unreasonability. For VSAT antennas, GE Americom seeks modification in the proposals so that the Commission can take into consideration in determining whether a regulation is unreasonable those regulations requiring excessive shielding. GE Americom also suggests the Commission make any presumptively illegal regulations preventing or restricting the use of VSATs where commercial uses are in fact located,

rather than merely “generally located.” Finally, GE Americom requests the Commission to scrutinize carefully local regulations affecting VSATs couched in terms of protecting communities from radiofrequency radiation when these are merely subterfuges for unjustifiable aesthetic regulations. Because VSATs involve only minimal radiation hazards, the scope of legitimate local concerns of non-ionizing radiation should be correspondingly minimal.

GE Americom endorses the regulations as proposed insofar as small receive-only antennas are concerned. In order to promote developing competition between direct-to-home Ku-band and BSS services, it is critical for the Commission to adopt that the criterion of protected receive-only antennas be not less than one meter

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In the Matter of )  
 ) IB Docket No. 95-59  
Preemption of Local Zoning Regulations )

GE American Communications, Inc. (“GE Americom”) hereby comments upon the Notice of Proposed Rulemaking in the above referenced docket.<sup>1</sup> This proposes to provide more explicit guidance to zoning authorities as how to regulate small satellite antennas consistently with the overriding federal interest in protecting the right of end-users to choose satellite technology as a means of meeting their information needs. While the proposed rules represent an improvement over those currently in effect, making them a welcome step, increased clarity is necessary in order for them to carry out their purpose of ensuring that local zoning regulations respect the supremacy of the federal obligation to protect the widespread availability and utility of small satellite antennas.<sup>2</sup>

GE Americom's stake in this matter stems from two aspects of its business of providing satellite communications. First, we have an important interest in promoting the

In addition, the Notice proposes an improvement over the present procedural rules, in the form of providing more effective consumer remedies to invoke the Commission's preemptive powers against overreaching zoning. This cures the disappointing outcome in the Commission's handling of a consumer complaint in the Deerfield situation, in which a federal court held that the Commission lacked jurisdiction to exercise its powers to preempt a local zoning regulation after a state court had found that regulation did not violate the Commission's rules. Preemption of Satellite Antenna Zoning Ordinance of the Town of Deerfield, N.Y., 7 FCC Rcd 2172 (1992), rev'd, sub nom. Deerfield v. FCC, 992 F. 2d 420 (2d Cir. 1992).

widespread use of small Ku-band antennas capable of receiving innovative direct-to-home (“DTH”) services from Ku-band transponders within GE Americom’s satellite fleet, half of which are used by customers to deliver video and other programming to small receive-only antennas that would be affected by the proposed rules. In addition to protecting the interests of its customers who are providing DTH services, GE Americom has subsidiary GE Capital Spacenet Services, Inc. (GE Spacenet), which is engaged in the business of installing and maintaining VSAT networks. VSAT networks use small antennas to provide important real-time voice and data services to a wide range of businesses such as banks and other financial institutions, insurance companies, credit card companies, travel agencies, and retail sales outlets.<sup>3</sup> These satellite-based applications make available significant alternatives to terrestrial communications networks services, and their availability must be preserved in order for customers to select the technology that best suits their communications needs.

As the Commission is well aware, certain overzealous local zoning authorities frequently single out satellite antennas for excessive regulation that, if not banning small antennas altogether, significantly reduces their value to end-users. The proposed rules improve on the present situation by being more instructive to local zoning authorities as to the scope of permissible local regulation that will not infringe upon federal supremacy in the area of telecommunications. In situations when zoning authorities may have overstepped the line separating permissible from impermissible regulation, the proposed

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<sup>3</sup> GE Americom’s current Ku-band fleet also provides services to VSAT networks of unaffiliated companies and believes that the projected growth of small-antenna services is so strong that it is planning to launch one additional Ku/C-band hybrid satellite in early 1996 and has applied to the Commission to construct, build and launch six more such satellites.

rules have adopted the innovative approach, which GE Americom supports, of placing the burden on those entities that seek to impose such ordinances that disfavor satellite antennas to justify such regulations.

For reasons of simplicity of administration and to protect the free availability of satellite communications, GE Americom would have preferred if the Commission adopted a rule making regulations unreasonably affecting the utility or affordability of small antennas per se illegal. If the Commission is disinclined to impose a per se rule prohibiting local regulation over small antennas in certain areas, it has done the next best thing by proposing to make presumptively unreasonable any regulation affecting the use or increasing the cost of antennas two meters or less in diameter in commercial/industrial areas and one meter or less in residential areas.

In addition, the Commission's proposed rules allow consumers to seek practical and effective redress against zoning rules that unreasonably bar their use of satellite antennas. The proposals have largely cured the defect in the situation caused by Deerfield and will permit the Commission to intervene at a timely point in order to provide meaningful and effective relief.

## **I.**

### **THE PROPOSED SITUATIONS IN WHICH THE COMMISSION CAN EXERCISE ITS POWERS OF PREEMPTION REPRESENT A SIGNIFICANT IMPROVEMENT OVER THE PRESENT RULES**

#### **A. The Proposed Regulations Improve Upon the Existing Regulations in Several Important Respects**

The Notice has proposed rules that significantly improve upon those applicable today. Under the current situation, the Commission's powers under Part 25.104 to

preempt local zoning regulations extend only to those regulations that “differentiate” between satellite receive-only antennas and other types of antenna facilities. Even in those limited situations, the Commission must refrain from acting against such regulations if the differentiation (1) has a “reasonable and clearly defined health, safety, or aesthetic objective” and (2) does not impose “unreasonable limitations” on or prevent reception of satellite-delivered signals; or (3) imposes costs upon the users of such facilities that are “excessive in light of the purchase and installation cost of the equipment.” 47 C.F.R. sec. 25.104 (1994).

The proposed rules improve upon the present section 25.104 in a number of important respects. Proposed section 25.104(a) expands the scope of preemption by authorizing the Commission to take action against any zoning ordinance that “substantially” limits reception by VSATs or receive-only antennas or that imposes “substantial” costs on users of such antennas. This broadens the scope of situations in which the Commission’s preemptive powers can be exercised beyond those under the present rules, which are limited only as to those ordinances that merely “differentiate” between satellite receive-only antennas and other types of antennas. Rather than take this approach, the Commission’s proposal would make presumptively unreasonable any local regulation that interferes with the utility of a small antenna or increases its cost. In addition, the proposal would limit the defenses against such presumption to those matters properly within the police powers of state and local jurisdiction. Finally, the proposed rules facilitate the ability of aggrieved consumers to invoke the Commission’s jurisdiction over a local regulation limiting the use of their small antenna.



These proposals represent an important step forward for situations in which zoning ordinances impose any unfair burdens on satellite antennas and other antennas. While GE Americom would prefer a rule that would make per se unreasonable all local regulations in situations where the Commission has made them only presumptively unreasonable and subject to preemption, we believe that the industry can live with the present rules, if they are clarified somewhat to reflect what we believe are the Commission's true intentions here.

**B. Some Common Text Changes are Required**

While the proposed regulations take a step in the right direction, GE Americom believes that certain changes in the regulations affecting VSATs and receive-only antennas alike may make them more understandable to the many zoning authorities that may not read the explanatory text of the final rules. GE Americom believes that the Commission should make its final rules in this docket themselves as explicit as possible to guide the drafters of local land-use regulations. Such clarity is vital to the fashioning of any rule that may invite federal preemption. Also without such clarity, the Commission is in danger of becoming inundated with repeated requests for declaratory judgments approving local regulations. Finally, clarity will also avoid municipalities and their residents from becoming embroiled in disputes before the Commission, imposing a strain on its limited resources.

Proposed section 25.104(a) in particular requires clarification in a number of important respects. These involve two aspects of this proposed regulation: the point at which a local regulation would become presumptively illegal and the allowable

justifications that zoning authorities can raise in defense to such a presumption. The first clarification is required in the scope of proposed section 25.104(a). While the regulation is made expressly applicable to VSAT antennas, proposed section 25.104(a) refers only to regulations that limit “reception by receive-only antennas.” It says nothing about regulations that limit substantially the transmission by VSATS, virtually all of which are transmit/receive antennas. Accordingly, proposed section 25.104(a) should be amended so that the presumption of unreasonableness will also apply to local actions that unreasonably limit transmissions by VSATs or that unreasonably raise the cost of their two-way operations.

A second clarification that is required will improve the guidance to local officials as to the identification of the point where local regulation will become presumptively unreasonable. As proposed, this states the possibility of federal preemption is raised if there is any local regulation that “substantially limits” the operation of a small antenna or “imposes substantial costs on users” of such an antenna. There is a danger that local zoning authorities, who may not bother to read the explanatory text accompanying the final rule, might interpret “substantial” as allowing measures that almost prohibit the use of small antennas and consider themselves authorized to impose regulations that all but forbid the use of such antennas.

Such action would conflict with the Commission’s explanation that what it really means by the term “substantial” is “a rather low threshold, indicating only that a federal interest has been burdened in a way that is not insignificant and which calls for justification.”<sup>4</sup> While GE Americom supports this definition, an explanation that is not

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<sup>4</sup> Notice at ¶ 57.

in the actual text of the regulation creates a danger that local officials could take a narrower reading of the proposed regulation than the Notice intends, out of a belief that the threshold at which the federal interest in small antennas becomes implicated is not rather low but rather high in relation to their concerns about land use.

In order to give local officials the guidance they need in order to draft regulations that properly accommodate local and federal concerns about small antennas, the Commission should consider modifying the text of the regulation to make more explicit the trigger point at which federal concerns over local regulation become implicated. GE Americom proposes the Commission reword the governing standard in section 25.104(a) so that it makes presumptively unlawful a regulation that “materially” limits transmission or reception of satellite signals, instead of “substantially” limits such functions. Likewise, the final regulations should make presumptively unlawful regulations that impose “material costs” upon the use of a small antenna instead of “substantial costs.” The term “material” is generally understood by those who draft regulations and those who apply them. A prohibition against “material” operational burdens and costs better conforms to the Commission’s view that the point at which the strong federal interest in the utility of small satellite antennas has been burdened is “rather low.” The use of the term “material” rather than “substantial” would make local officials aware more precisely of the rather low point that local regulations interfere with the use of small antennas at which the Commission will become concerned.

A third instance in which additional clarity is required to proposed section 25.104(a) is its reference to any “local land-use, building, or similar regulations” that may

affect antennas. GE Americom assumes that this includes any state-wide regulation, as well as any permission required to be obtained in order to locate a small antenna. A regulation that requires small-antenna users to apply for permission to install and use such an antenna and then sets unreasonable terms for the grant of such permission equally disadvantages the use of such antennas as any regulation that directly reduces the utility of small antennas and increases their costs.

Finally, the Commission should clarify the showing that local officials must make to justify presumptively unreasonable regulations. Proposed section 25.104(a) lists two criteria for judging whether a local regulation is a reasonable exercise of local authority. Subsection (a)(1) provides that a presumption of unreasonableness can be rebutted by “a clearly defined and expressly stated health, safety or aesthetic reason.” GE Americom believes that the intention of the Commission’s proposal is that the “health, safety or aesthetic objective” that can be used to rebut a presumption of unreasonableness must be “clearly-defined” in the regulation itself, rather than in debates at zoning board meetings or post hoc rationalizations by local officials in the face of preemption. By requiring a “clearly defined and expressly stated health, safety or aesthetic reason” to be included in the text of a regulation will require the close examination by zoning officials, which GE Americom believes is necessary, as to whether a contemplated regulation truly protects local concerns in health, safety and aesthetics.

The second test of whether a local regulation is reasonable also needs clarification. Proposed section 25.104(a)(2) provides that local action can be justified if it properly recognizes “[t]he federal interest in fair and effective competition among competing

communications service providers.” Because local officials are not as attuned to what constitutes “fair and effective competition among communications service providers” as is the Commission, this rebuttal defense should be changed so as to stress the underlying purpose of the proposed regulations, which is the strong federal interest in the convenient and inexpensive transmission and receipt of satellite signals by small antennas.

GE Americom believes that, with these minor amendments in the rules, the Commission will provide more explicit guidance to local officials about the scope of permissible regulation for small antennas in general. The following sections discuss improvements GE Americom believes are necessary in the separate situations affecting local zoning of VSATs and receive-only antennas.

## **II.**

### **CERTAIN CLARIFICATION IS REQUIRED IN THE RULES AS TO THE SCOPE OF PERMISSIBLE ZONING FOR VSATS**

Proposed section 25.104(b) properly recognizes the strong federal concerns in the use of VSATs by establishing a rebuttable presumption that any zoning regulation that unreasonably interferes with the activities of VSATs of two meters or less in diameter in commercial areas or imposes excessive costs on their users is unreasonable within the meaning of proposed section 25.104(a). If proposed section 25.104(a) is clarified to protect the transmitting capability of a VSAT as well as its receiving capability, as GE Americom has suggested, the proposed two-meter size criterion for such antennas is workable in principle to GE Spacenet. With minor exceptions, involving slightly larger antennas on the periphery of a particular satellite’s coverage (where no adverse action has

been taken against such antennas), all of the VSATs currently being installed by GE Americom are 1.8 meters in diameter or smaller.

**A. The Cost of Shielding Should be Taken into Account in Determining Whether Local Regulations Impose Unreasonable Costs on VSAT Users**

Additional clarification, however, is required in the proposed regulations as they apply to VSATs. For example, one needed clarification is a broader elaboration of the increased “costs” that may not be imposed upon a VSAT located in a commercial or industrial zone without raising a presumption that they are unreasonable. Subsection (e)(3) suggests that unreasonable regulation is that which requires the proposed owner of a small antenna to pay an amount greater than the “aggregate purchase and installation costs” of such an antenna.

The Commission should explain that the increased costs due to local regulations that will be taken into account in determining whether the amount of increase is unreasonable should not be limited to additions to the costs of the antenna and mounting equipment itself, plus labor. The Commission should also figure in the additional costs required by a regulation in designing, acquiring and constructing any shielding.

This is an important point, because many communities require shielding of VSATs, not for reasons of health but for those of aesthetics. While shielding sufficient to exclude from view what some communities regard as the unsightly appearance of a VSAT is often required, some communities go to the further length of specifying such matters as the design and materials that must be used in such shielding. For example, a number of communities require that a VSAT be shielded by a concrete wall. This is done in

situations where either less expensive shielding would equally conceal the antenna and where rooftop installation would effectively put a VSAT out of sight except to the occupants of taller buildings.

Because highly expensive shielding does drive up the cost of a VSAT, thereby restricting its use, the Commission should make explicit that the costs that it will take into account in evaluating whether they are impermissible will include those of antenna shielding. In addition, the cost of shielding, including design, installation, and materials, should be factored into whether the regulatory-based costs imposed on use of a small antenna will trigger the right of a user to invoke the Commission's processes under proposed section 25.104(e)(3).

**B. Improvements are Required in the Proper Definition of the Geographic Areas Where Rebuttable Presumptions of Unreasonableness Arise**

The geographical scope of the rebuttable presumption of unreasonable regulation of VSATs in proposed section 25.04(b)(1) may be too narrow. This applies a presumption that a local land-use regulation is unreasonable only where it substantially affects VSATs in areas where commercial or industrial uses are "generally permitted" and not where such commercial uses are in fact located. For example, a prospective satellite customer needing satellite communications may not necessarily be located where commercial or industrial uses are "generally permitted" but may be located elsewhere, whether by reason of being permitted by local zoning regulations or allowed by pre-existing use, a variance or otherwise.

Thus, if a potential VSAT customer is located outside of an area where commercial or industrial use is "generally permitted," any regulation materially affecting

the use or cost of a VSAT would not be deemed to be presumptively unreasonable.

Instead, zoning authorities could impose substantial costs on a VSAT or limit its utility under an easier standard of justification. In GE Americom's opinion, the term "generally permitted" introduces unwarranted ambiguity into what should be a clear definition of areas where regulations against VSATs are presumptively unlawful, as well as creating the potential for mischief.

This situation of a customer located outside of an area where commercial or industrial uses are only "generally allowed" is of particular concern to GE Americom, because one of GE Spacenet's largest customers is a national drugstore chain, which uses a VSAT network to connect local stores to a central headquarters for inventory control, price changes and other uses. While most chain drugstores are located in malls and other shopping centers, where we assume that VSATs would be allowed under the regulations as proposed, drugstores are more likely candidates for a variance than noisy factories or traffic-clogged shopping malls. For this reason, GE Americom believes that a presumption of unreasonableness should arise as to local restrictions that substantially increase the cost or limit the use of a VSAT of two meters or less in areas where commercial or industrial uses are in fact permitted by local land-use regulations -- and not where such uses are only "generally permitted." If a local authority permits a commercial activity, such as a drugstore, to be located outside of a place where such activities are "generally permitted," it is not unreasonable to require it not to interfere materially with installation and operation of a VSAT, since it can always insist that the facility be shielded for aesthetic reasons.



**C. The Proposed Rebuttal Criterion Dealing with Aesthetic Objections to VSATs Needs to be Narrowed**

In the experience of GE Spacenet, most local objections to the installation of VSATs are couched in terms of aesthetics. To allow local officials to overcome a presumption of unreasonableness by offering a “clearly defined and expressly stated . . . aesthetic objection,” permitted by proposed section 25.104(a)(1), would allow zoning officials opposed to VSATs on aesthetic grounds to cast what is tantamount to a veto against VSATs by saying “We think VSATs are just eyesores.” Because local officials can offer such a rebuttal defense to a presumption of unreasonableness as to regulations affecting VSATs wherever they are located, this means that local officials could effectively ban VSATs from being located even in areas where commercial or industrial uses are generally permitted.

GE Americom acknowledges that genuine aesthetic concerns are more local than federal in nature. Nevertheless, the Commission should carefully scrutinize regulations expressing objections to VSATs made on purportedly aesthetic grounds. For example, a regulation prohibiting VSATs in an historical area of a city might be an appropriate regulation if all other modern implements were also banned. But for local zoning officials to defend a regulation only on a general, unparticularized aesthetic objection to VSATs should not be permitted. In all situations, zoning officials should be allowed to rebut a presumption of unreasonableness only by a showing that their aesthetic objections cannot be ameliorated by requirements of shielding or changes in location, such as removal from a rooftop to an equally suitable location if such an alternative site exists and does not reduce the utility of a VSAT or drive up its costs.

For this reason, we recommend that the Commission take into account, in determining whether a regulation that unreasonably limits reception or transmission or which imposes unreasonable costs on the use of a small antenna can be rebutted on aesthetic grounds, only those aesthetic objections that cannot be cured by reasonable and inexpensive measures, such as shielding a VSAT or locating it behind a building.

As a related matter, the Commission should be careful to ensure that local regulations imposed in the name of protection against non-ionizing radiation are not in fact used to cloak insufficiently-supportable aesthetic objections. No VSAT that GE Spacenet installs presents any hazards to human health, because the main beam of a VSAT must be pointed on an interference-free path to above the horizon, and their sidelobes do not produce levels of radiation in excess of generally acceptable ANSI standards. Therefore, the Commission should carefully scrutinize local regulations that require excessive shielding to ensure that they are, in fact, prompted by a reasonable exercise of the extremely limited scope of local health concerns allowable for radiofrequency radiation. GE Americom would not argue against the right of the the Commission to preempt local concerns about radiofrequency radiation, since this is extensively regulated by the Commission itself. In any event, if, in administering the proposed regulations, the Commission sees that communities are disguising what are essentially insufficiently justifiable aesthetic objections in order to require excessive shielding for supposed health and safety reasons, it should give serious thought to preempting local regulation relating to non-ionizing radiation as well.

### **III.**

#### **THE COMMISSION SHOULD PROTECT RECEIVE-ONLY ANTENNAS ONE METER AND SMALLER**

The proposed regulations would create a presumption that local regulations significantly affecting the reception or the cost of a receive-only antenna one meter or smaller are unreasonable. GE Americom supports this proposal, and the size criterion of antennas of one meter or less should be retained as a critical element of the final rules.

The requirement that the presumption of unreasonableness apply to local regulations affecting the cost of utility of receive-only antennas of at least one meter is necessary to preserve the ability of end users to receive DTH signals of medium-powered Ku-band satellites. One meter is the smallest antenna that complies with the Commission's two-degree spacing limitations. Accordingly, GE Americom believes that the Commission should not reduce this size limit. Although current BSS dishes are as small as eighteen inches in diameter, there are no Ku-band receive-only antennas less than one meter in production that can comply with the Commission's satellite spacing requirements.

Accordingly, reducing the size of protected receive-only antennas below one meter would mean that Ku-band antennas could be effectively free of unreasonable local regulation only in areas where commercial and industrial uses were generally permitted. Setting a receive-only antenna criterion for less than one meter would strip the presumption of unreasonableness from regulations affecting the utility of one meter antennas in residential areas to which Ku-band DTH programming is broadcast, penalizing them in relation to smaller antennas allowable by BSS, with which medium-powered Ku-

band DTH services compete. This is the sort of handicapping among technologies in which the Commission should not engage, particularly in establishing a regulatory regime that is designed to allow users to install whatever small antennas they believe best suit their interests free of unreasonable regulatory interference from local regulation. Accordingly, the proposed size of antennas that make certain zoning regulations presumably unreasonable is appropriate and should be retained in the final rules.

Because no radiation hazard is involved in receive-only antennas, the FCC should also clarify that local officials cannot in any circumstances unreasonably restrict the use or increase the cost of small receive-only antennas for health reasons relating to non-ionizing radiation. The only allowable health and safety concern, in fact, should be limited to regulations designed to ensure that receive-only antennas are properly secured to buildings and other structures.

### **Conclusion**

The Commission has proposed rules that more precisely balance the strong federal interest in promoting the use of small satellite antennas. It should adopt these with the changes and clarifications proposed by GE Americom.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Alexander P. Humphrey", is written over the typed name.

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